

Navigating numbers: Inflation

Student toolkit

Explore the concept of inflation, its causes, effects, measurement and implications.



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Overview

Inflation is a measure of how prices of goods and services are changing in the UK, and it can have a big impact on people's household finances.

Explore the concept of inflation, learning about how it is measured and what the data is used for. Use the Shopping Price Comparison tool and real-world data from the Consumer Prices Index, including owner occupiers' housing costs (CPIH) dataset, to examine data about prices and inflation. They can help you explore the implications of inflation for consumers, businesses and policymakers.





Overview

Featured tools and datasets

[Shopping Price Comparison tool](#): An interactive tool to see how the price of hundreds of different items have changed since last year.

Categories of items include:

- groceries
- clothing and footwear
- health
- recreation and culture
- services
- transport
- household items
- eating and drinking out

[Consumer Prices Index including owner occupiers' housing costs \(CPIH\)](#): The most comprehensive measure of inflation. It extends CPI to include a measure of council tax costs, along with what is known as owner occupiers' housing costs (OOH). These are costs associated with owning, maintaining and living in your own home.

[Household Costs Indices dataset](#): A spreadsheet containing data tables of the Household Costs Indices, which show how different household groups experience inflation.



Overview

Additional resources

For more information, try exploring these datasets.

- [Household Costs Indices for UK household groups: January 2022 to September 2023](#)
- [International comparisons of consumer prices: August 2021](#)
- [House of Commons research briefing: International Inflation: Key Economic Indicators](#)
- [Consumer price inflation, historical data, UK 1950 to 1988](#)
- [House of Commons research briefing: Poverty in the UK: Statistics](#)
- [CPIH-consistent inflation rate estimates for UK household groups: November to December 2022](#)
- [Inflation and cost of living for household groups, UK: October 2022](#)
- [Producer price inflation, UK: January 2024](#)

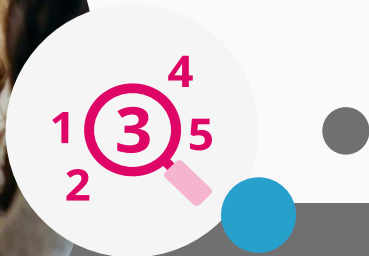


Maths: Inflation data analysis

Your goal is to understand how prices have changed over time and the implications of inflation on the economy. You will explore historical inflation data in the UK, creating graphs and charts to visualise inflation rates, and analyse economic trends and sharpen your mathematical and analytical skills.

Learning objectives

- Analyse historical inflation data using mathematical techniques.
- Create visual representations of inflation rates over time using graphs and charts.
- Calculate and interpret statistical measures.
- Analyse and interpret real economic data.



Maths: Inflation data analysis

Get started

Examples of questions to answer or hypotheses to test

- How has the average annual inflation rate in the UK changed over the past 60 years? Are there any noticeable trends or patterns?
- Can you identify any significant periods of high inflation in UK history? What were the economic and social consequences of these periods?
- How does the UK's inflation rate compare to that of other developed countries over the same time period?
- Are there any correlations between changes in the UK inflation rate and major historical events, such as wars, economic recessions or changes in government policies?
- What sectors of the economy have experienced the highest rates of inflation over time? For example, housing, food or transportation. Are there any notable differences between sectors?



Maths: Inflation data analysis

Using the tools

Use the ONS tools and dataset to help answer your question or test your hypothesis. You might like to:

- familiarise yourself with the concept of inflation and its significance in the economy
- research and select appropriate mathematical and statistical tools to analyse the inflation data
- consider which types of graphs and charts will best illustrate the data
- compare and contrast inflation rates across different time periods, such as annually, quarterly or decade-wise



Things to think about

- Where will you source additional data if you need it and how will you combine that with ONS data?
- How will you make sure your charts and graphs are understandable?



Sociology: Societal impact of inflation

Your goal is to assess the societal effects of inflation, including its impact on:

- various socio-economic groups
- employment
- poverty
- social inequality

You will use statistical analysis to identify correlations between inflation rates and indicators of socio-economic well-being, such as unemployment rates, poverty levels and income inequality.

Learning objectives

- Understand the societal effects of inflation on different socio-economic groups.
- Develop skills in secondary research methods, including tracing sources and reliability of data.
- Analyse and interpret data to identify patterns and trends in how inflation impacts individuals' lives.



Sociology: Societal impact of inflation

Get started

Examples of questions to answer or hypotheses to test

- Inflation erodes the purchasing power of low-income households, pushing them further into poverty.
- The impact of inflation on the cost of essential goods and services, such as food, housing, and healthcare, has a disproportionate impact on vulnerable populations.
- How does inflation interact with existing social inequalities, disparities in wealth distribution and access to resources?



Sociology: Societal impact of inflation

Using the tools

Use the ONS tools and datasets to analyse the data in order to answer your question or test your hypothesis. You might like to:

- look at historical data and case studies to examine how inflation has affected different socio-economic groups over time
- research example periods of high inflation, such as the hyperinflation in Weimar Germany or more recent cases, such as Zimbabwe or Venezuela
- look at how inflation typically influences employment patterns, such as the Phillips curve, which suggests an inverse relationship between inflation and unemployment



Things to think about

Where will you source additional data if you need it? How will you combine that with ONS data?



Business: Measuring inflation

Your goal is to explore different ways of calculating inflation, and the methodology behind the calculation. You should also analyse the implication of inflation for consumers, businesses and policymakers.

Learning objectives

- Differentiate between inflation measures and their calculation methodologies.
- Understand the typical uses of inflation measures in economic analysis and policymaking.
- Analyse the implications of different inflation measures for consumers, businesses and policymakers.



Business: Measuring inflation



Get started

Examples of questions to answer or hypotheses to test

- How does inflation impact businesses' costs, and how do they typically respond to rising inflation?
- How might businesses adjust their pricing strategies in response to changes in inflation rates?
- What are some potential challenges that businesses may face when navigating periods of high inflation?
- How does inflation impact consumers' purchasing power and the overall cost of living?
- How does inflation affect consumer demand for goods and services, and what implications does this have for businesses?
- How do businesses factor inflation expectations into their long-term strategic planning and decision-making processes?

Business: Measuring inflation

Using the tools

Use the ONS tools and datasets to analyse the data in order to answer your question or test your hypothesis. You might like to:

- discuss the concept of inflation and its importance in the economy
- research and compile information on the ONS's tools and datasets, such as calculation methodology, items included, frequency of calculation, uses and limitations
- examine how different stakeholders are affected by inflation, such as consumers, businesses and policymakers
- research business strategies for coping with

inflation, such as pricing strategies, cost-cutting measures, hedging against inflation and diversification



Things to think about

- Are there any industries or sectors that are particularly sensitive to changes in inflation rates?
- Can you gather any primary data from different stakeholders?
- Where will you source additional data if you need it? How will you combine that with ONS data?